WE CLAIM:

1. A method for allocating a subnet identifier to a subnet in a network of machines with multiple subnets and a plurality of associated routers, said subnet identifier providing at least part of an address of the subnet coupled to a router interface that interfaces one of said routers to said subnet, the method including the steps of:

determining that a subnet identifier for one of said subnets is required;

allocating automatically a unique subnet identifier to said router interface, wherein said unique subnet identifier is determined to be unique by said network; and

configuring said subnet to be addressed by said network of machines by using an address based at least partially on said unique subnet identifier.

2. A method for allocating a subnet identifier as claimed in claim 1, further characterized by determining and allocating a unique subnet identifier for every operative router interface in the network.

3. A method for allocating a subnet identifier as claimed in claim 1, wherein at least one router has more than one router interface, and wherein each router interface is allocated a unique subnet identifier.

4. A method for allocating a subnet identifier as claimed in claim 1, wherein each router configures said subnet based on the router interface coupled to the subnet.

5. A method for allocating a subnet identifier as claimed in claim 1, further characterized by there being more than one unique subnet interface identifier assigned to a subnet.

6. A method for allocating a subnet identifier as claimed in claim 1, wherein the subnet is a link with machines coupled thereto.

7. A method for allocating a subnet identifier as claimed in claim 1, wherein the step of allocating is characterized by the steps of:

obtaining said identifier;

sending a claim request for said identifier from a claim requesting router, that is one of said routers, to at least one other router in said network; and

validating said identifier as unique to said network if said requesting router does not receive an invalidation message within a predefined time period, said invalidation message being indicative of said identifier being allocated to one of said routers.

8. A method for allocating a subnet identifier as claimed in claim 7, wherein the step of sending is repeated at least once within said predefined time period.

9. A method for allocating a subnet identifier as claimed in claim 7, wherein the step of sending is characterized by at least one of said routers receiving said claim request and thereafter propagating said claim request to at least one other of said routers.

10. A method for allocating a subnet identifier as claimed in claim 7 wherein said validating step is further characterized by one of said routers, operating as a receiving router, providing said invalidation message if upon receipt of said claim request the receiving router has a prior claim to said identifier.

11. A method for allocating a subnet identifier as claimed in claim 1, wherein each said router interface has multiple unique subnet identifiers for different protocols.

12. A network of machines with multiple subnets and a plurality of associated routers, wherein the network allocates a subnet identifier to a router interface by the following steps:

determining that a subnet identifier for the subnet coupled to the router interface is required;

allocating automatically a unique subnet identifier to said router interface, wherein said unique subnet identifier is determined to be unique by said network; and

configuring said subnet to be addressed by said network of machines by using an address based at least partially on said unique subnet identifier.

13. A network of machines as claimed in claim 12, wherein the network is further characterized by determining and allocating a unique subnet identifier for every operative router interface in the network.

14. A network of machines as claimed in claim 12 wherein at least one router has more than one router interface, and wherein each router interface is allocated a unique subnet identifier.

15. A network of machines as claimed in claim 12, wherein each router configures said subnet based on the router interface coupled to the subnet.

16. A network of machines as claimed in claim 12, further characterized by there being more than one unique subnet interface identifier assigned to a subnet.